AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q77862

Application No.: 10/677,273

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended): A secure method of exchanging information messages sent

successively from a sending platform to a receiving platform, the method comprising:

a) an initialization sequence in which an initialization message containing information

relating to a date t1 for sending a first information message M1 is exchanged between said

sending platform and said receiving platform so that said sending platform and said receiving

platform know said date t₁ for sending said first information message M₁, and

b) an information message transmission sequence in which:

- said information messages are sent successively by said sending platform at given time

intervals ΔT_E with a sending time tolerance δ based on a clock specific to said sending platform,

so that said first message M₁ is sent at said date t₁ on said clock and the nth message M_n is sent at

the date $t_n = t_1 + (n-1) \cdot \Delta T_E + \delta$, each message M_n being coded by means of a dynamic code C_n

specific to said date t_n of sending said message, and

- said messages received by said receiving platform are processed as a function of their

reception date t_r based on a clock specific to said receiving platform so that said messages

received successively in an a same observation time window F_n containing t_n with a width of T_F

are decoded using a decoding sequence DC_n adapted to decode said dynamic code C_n, said clock

of said receiving platform being synchronized to said date t₁ on receiving said first message M₁.

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2. (original): The secure method claimed in claim 1 of exchanging information messages, wherein during said initialization sequence a) a coded initialization message M_0 is sent from said sending platform to said receiving platform and a coded initialization message M_0 is sent from said receiving platform to said sending platform, said initialization messages M_0 , M_0 containing the information relating to said date t_1 for sending said first information message M_1 , and said initialization messages M_0 , M_0 being decoded by said sending platform and said receiving platform which then know said date t_1 for sending said first information message M_1 .

- 3. (original): The secure method claimed in claim 1 of exchanging information messages, wherein, if said first message M₁ is not received within an allotted time after reception of said initialization message, said clock of said sending platform is automatically synchronized to said date t₁ at the moment corresponding to the end of the allotted time.
- 4. (previously presented): The secure method claimed in claim 1 of exchanging information messages, wherein said observation window F_n corresponds to a time window $[t_1+(n-1)*\Delta T_E-\Delta T_F*\epsilon, t_1+(n-1)*\Delta T_E+\Delta T_F*(1-\epsilon)]$, where the width of the observation window ΔT_F satisfies the equation $\Delta T_F \leq \Delta T_E$ and ϵ is from 0 to 1.
- 5. (original): The secure method claimed in claim 1 of exchanging information messages, wherein a clock synchronization signal is sent regularly by said sending platform between sending messages M_n, said synchronization signal being used to correct the frequency or the phase of the internal clock of said receiving platform dynamically in order to reduce the

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phase or frequency error between the internal clocks of said receiving platform and said sending

platform.

6. (original): The secure method claimed in claim 1 of exchanging information

messages, wherein said information messages decoded by said receiving platform are transmitted

to an information processing module.

7. (original): The secure method claimed in claim 1 of exchanging information

messages, said messages received by said receiving platform during an observation window F_n

are stored sequentially in a memory able to store only one message at a time and only the

message stored in said memory at the end of said observation window F_n is transmitted to said

information processing module.

8. (original): The secure method claimed in claim 1 of exchanging information

messages, wherein said sending platform is part of a centralized control station of a rail traffic

supervision and control system, said receiving platform is part of a fixed installation disposed

alongside a rail track, and said information processing module is a control unit on board a train

circulating on a track section associated with said fixed installation.

9. (cancelled).

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